

### Abstract

Method and switching arrangement for the identification of Pupin coils

The invention relates to a method and a switching arrangement for the identification of Pupin coils in a telecommunications line.

In order to identify Pupin coils, periodic transmission symbols are transmitted by a transmission device (2, 4, 5), an analog reception signal is received, sampled and processed further by a reception device (3, 6), the frequency response of the reception signal is determined for a prescribed number of frequency points in a prescribed frequency range, a function with function values ( $F(f_i)$ ) is calculated from the real part and the imaginary part of the frequency response of the reception signal, and a differential vector ( $\Delta r_i$ ) is determined from the function values ( $F(f_i)$ ) by a computing unit (11, 12, 13, 14, 15), a criterion which specifies whether a pupinized line is present being derived from the components of the differential vector ( $\Delta r_i$ ).

Figure 7